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Calciphylaxis in a paediatric patient

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DESCRIPTION

A 17 year old presented with a painful, erythematous lesion to the dorsum of his right foot following minor trauma. The lesion was cold, 5 cm in diameter with a well-defined edge surrounding scattered petechiae (figure 1). He was unable to move his foot or weight bear due to pain. C-reactive protein and plain x-rays were normal.

The patient has chronic kidney disease (CKD) stage 5 due to IgA nephropathy and had received haemodialysis for 16 months. Serum calcium, phosphate and parathyroid hormone (PTH) were raised at 2.56 mmol/l, 3.32 mmol/l and 19.5 pmol/l. Compliance with diet and medication was inconsistent.

A clinical diagnosis of calciphylaxis was made. The patient was treated with daily dialysis sessions, cessation of both vitamin D analogues and calcium-based phosphate binders and instigation of Cinacalcet. He required opiate analgesia. The lesion improved with control of his calcium-phosphate product.

DISCUSSION

Calciphylaxis is rare in paediatric populations¹ and can be confused with cellulitis, fracture or soft tissue injury. It is characterised by vascular calcification, thrombosis and skin necrosis.² It is seen in patients with CKD 4-5 as a consequence of raised serum calcium and phosphate concentrations and secondary hyperparathyroidism.² The prognosis is often poor with chronic, non-healing ulcers leading to sepsis and death.² Treatment is with reduction of the calcium-phosphate product, adequate analgesia and aggressive surgical wound care.²⁻³ Cinacalcet, a calcimimetic agent, increases the sensitivity of the parathyroid gland to calcium and therefore decreases PTH levels. Case reports of the use of Cinacalcet in calciphylaxis suggest improved wound healing.³

Competing interests None.**Patient consent** Obtained.

Figure 1 Calciphylaxis of the foot.

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